

F16C05 thru F16C20

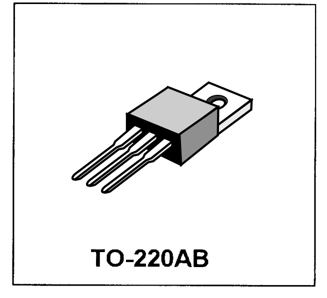
Switchmode
Dual Fast Recovery Power Rectifiers

... Designed for use in switching power supplies. inverters and as free wheeling diodes. These state-of-the-art devices have the following features:

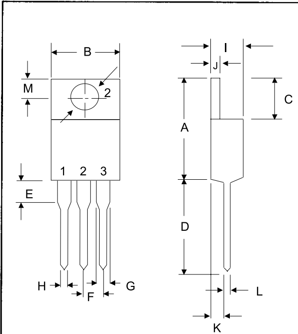
* Glass Passivated chip junctions
* Low Reverse Leakage Current
* Fast Switching for High Efficiency
* 150 °C Operating Junction Temperature
* Low Forward Voltage , High Current Capability
* Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O

FAST RECOVERY RECTIFIERS

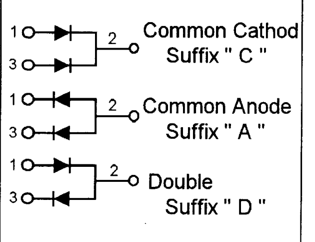
16 AMPERES
50 -- 200 VOLTS



TO-220AB



DIM	MILLMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	6.01	6.52
D	13.06	14.62
E	3.57	4.07
F	2.42	2.66
G	1.12	1.36
H	0.72	0.96
I	4.22	4.98
J	1.14	1.36
K	2.20	2.97
L	0.33	0.55
M	2.48	2.98
O	3.70	3.90



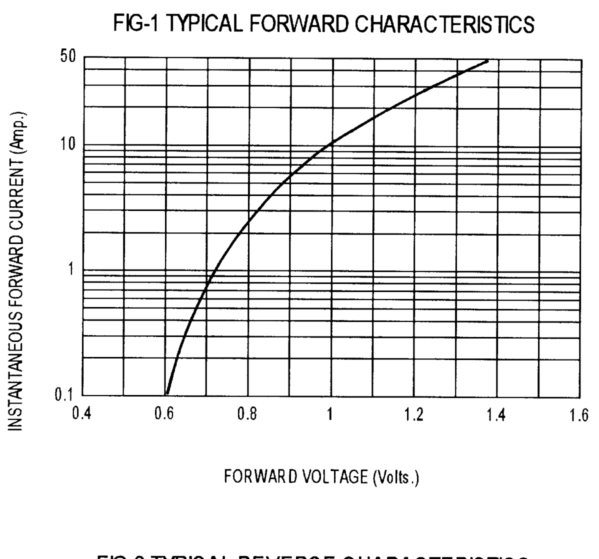
MAXIMUM RATINGS

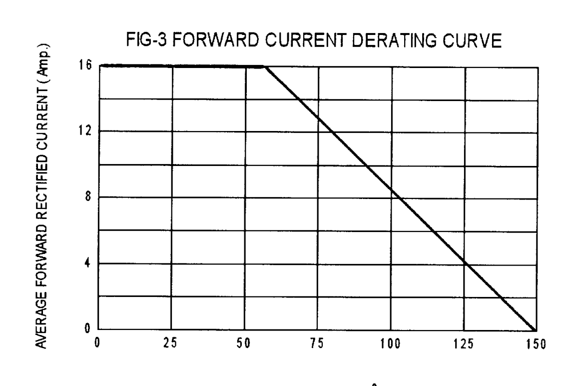
Characteristic	Symbol	F16C				Unit
		05	10	15	20	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	V
Average Rectifier Forward Current Per Leg T_C=125°C Per Total Device	$I_{F(AV)}$	8.0 16				A
Peak Repetitive Forward Current (Rate V_R ,Square Wave,20kHz,T_C=125°C)	I_{FM}	16				A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware,single phase,60Hz)	I_{FSM}	150				A
Operating and Storage Junction Temperature Range	T_J , T_{stg}	- 65 to + 150				°C

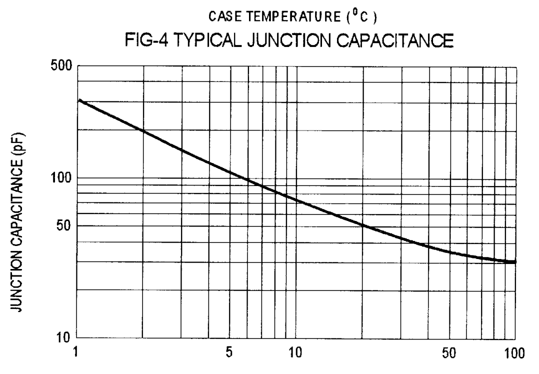
ELECTRICAL CHARACTERISTICS

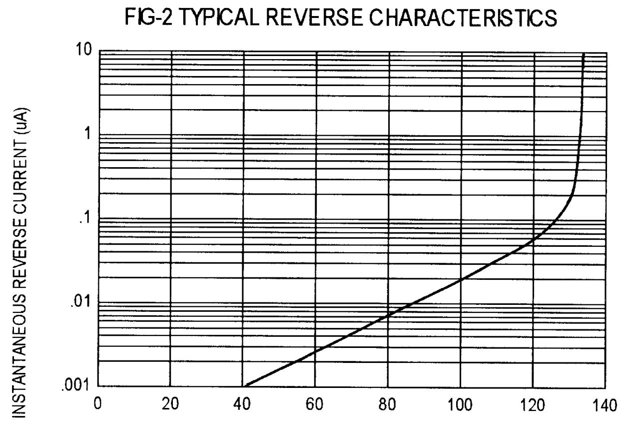
Characteristic	Symbol	F16C				Unit
		05	10	15	20	
Maximum Instantaneous Forward Voltage (I_F=8.0 Amp, T_C = 25 °C)	V_F	1.30				V
Maximum Instantaneous Reverse Current (Rated DC Voltage, T_C = 25 °C) (Rated DC Voltage, T_C = 125 °C)	I_R	10 500				uA
Reverse Recovery Time (I_F = 0.5 A, I_R =1.0 , I_{rr} =0.25 A)	T_{rr}	150				ns
Typical Junction Capacitance (Reverse Voltage of 4 volts & f=1 MHz)	C_P	120				pF

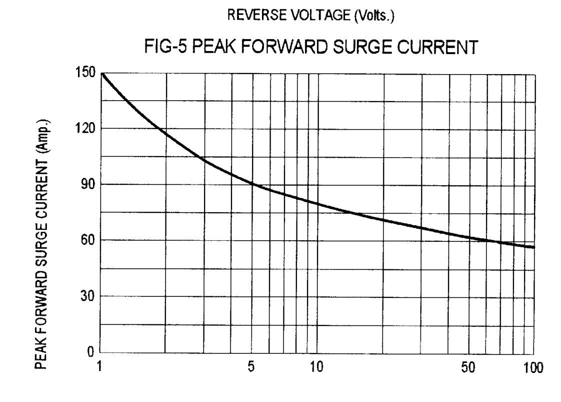
F16C05 Thru F16C20

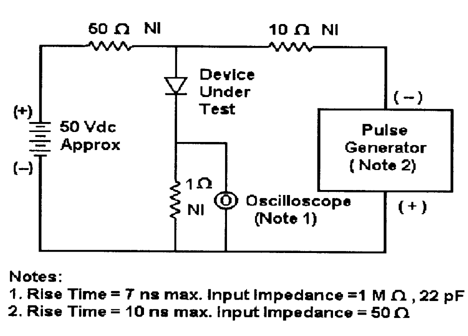














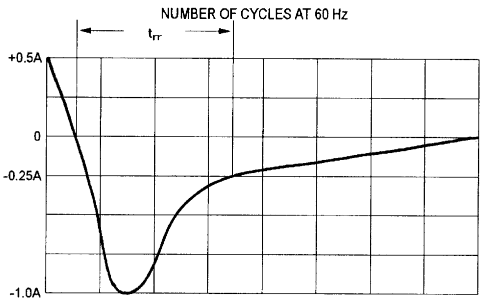


Fig-6 Reverse Recovery Time Characteristic and Test Circuit Diagram